Ongoing uncertainties in antithrombotic management of the "hot carotid"

The recent *CMAJ* review article by Drs. Kapila and colleagues offered an excellent update on the management of symptomatic extracranial internal carotid artery stenosis.[1] Drawing on evidence from the Clopidogrel in High-Risk Patients with Acute Nondisabling Cerebrovascular Events (CHANCE)[2] and Platelet-Oriented Inhibition in New TIA and Minor Ischemic Stroke (POINT)[3] trials, the authors recommended the use of dual-antiplatelet therapy (DAPT) limited to 21 days and then downgraded to monotherapy after intervention. However, as noted by the authors, these trials, by design, generally excluded patients with acutely symptomatic carotid stenosis (so-called "hot carotids"). As a result, there is a paucity of high-quality data regarding the optimal antithrombotic regimen for such patients, particularly while they await revascularization with carotid artery endarterectomy or stenting.[4]

In 2018, *Neurology: Clinical Practice* published the preliminary results of a survey of its readership about the antithrombotic management of patients with hot carotids who were waiting for carotid artery endarterectomy or stenting, along with commentaries by experts from 3 continents.[4] In the perioperative period, respondents tended to favour acetylsalicylic acid (ASA): 44% chose low-dose ASA (75–100 mg), 42% chose high-dose ASA (160–325 mg) and 44% chose clopidogrel, either alone or in combination.

An important source of uncertainty was the level of concern expressed by surgeons in the survey about the increased risk of bleeding in patients on DAPT undergoing carotid artery endarterectomy: some were comfortable operating while patients were receiving DAPT, while others were not. Consequently, respondents reported that the antiplatelet regimen for patients often reverted back to single-antiplatelet therapy (ASA), during the perioperative period, with varying durations of time off DAPT.[4]

Another important source of uncertainty was what to do in the presence of an intraluminal thrombus associated with the stenosis.[5] In a prospective cohort study involving 61 patients with acute stroke or transient ischemic attack and intraluminal thrombi in the cervicocephalic arteries, participants were variably treated with heparin (36%), clopidogrel (25%) or low-molecular-weight heparin (23%).

The areas of relative disagreement or equipoise identified by such studies may help inform the design of future randomized controlled trials in this area, which will need to be based on an understanding of the practice patterns and attitudes of physician stakeholders to recruit patients successfully and help resolve practical uncertainties in the field.[6]

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